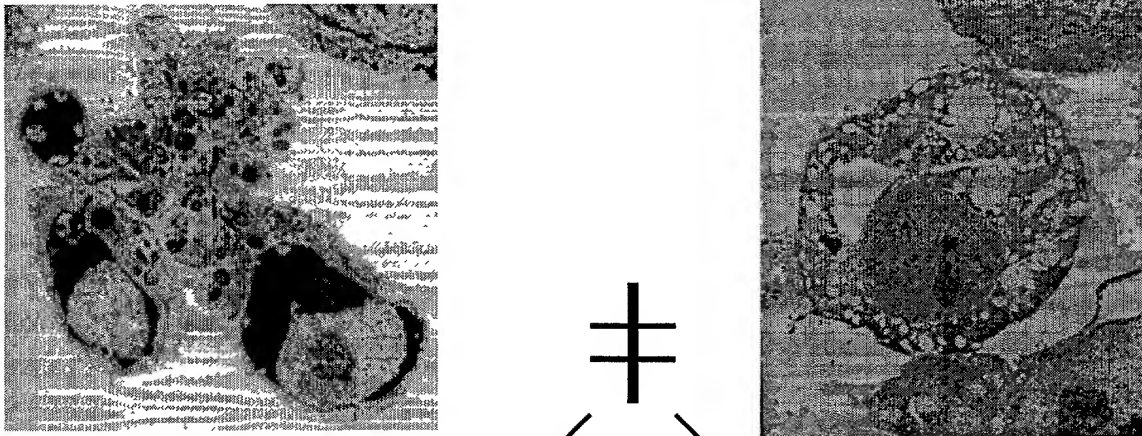


# Death or Death Decision



**Caspase Inhibitors**

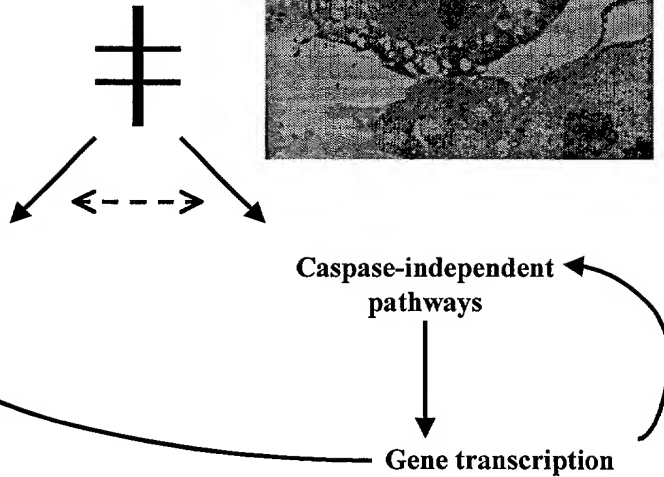
- endogenous
- exogenous
- inactivation
- developmental



**Caspase-  
dependent  
pathways**

**Caspase-independent  
pathways**

**Gene transcription**



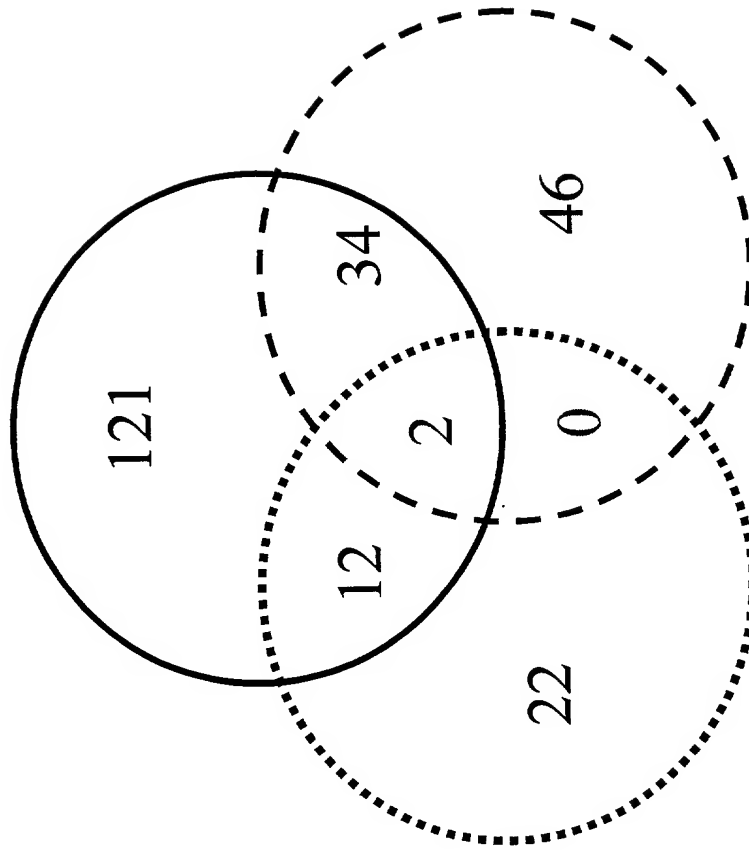
**Figure 1**

10079929 "02103  
206T20" 6266/001

206720" 6265200F

1.7 fold or greater differential expression  
50% or greater spot area  
200 or greater probe signal strength  
Induced and repressed genes combined

## Apoptosis vs. Paraptosis



## Control vs. Paraptosis

Numbers in circles indicate the number of differentially expressed genes identified using a 7075 gene Human unigene cDNA gene expression microarray. Numbers in the outer portions of tehircles are the uniquely expressed genes, those in the intersections are common to both experiments. Note the lack of overlap (only 2 of 116 transcripts) between paraptosis and apoptosis.

FIGURE 2

206 F.20 62662007

# Apoptosis vs. Paraptosis: Inhibitors

	<u>Apoptosis</u>	<u>Paraptosis</u>
<b>p35</b>	Inhibits	No
<b>xiap</b>	Inhibits	No
<b>zVAD.fmk</b>	Inhibits	No
<b>BAF</b>	Inhibits	No
<b>Bcl-xL</b>	Inhibits	No
<b>Bcl-2</b>	Inhibits	No

FIGURE 3

206T20" 6266200T

# Apoptosis vs. Paraptosis: Morphology

	<u>Apoptosis</u>	<u>Paraptosis</u>
<b>Nuclear fragmentation</b>	<b>Yes</b>	<b>No</b>
<b>Chromatin condensation</b>	<b>Yes</b>	<b>Slight</b>
<b>Cytoplasmic vacuolation</b>	<b>No</b>	<b>Yes</b>
<b>Mitochondrial swelling</b>	<b>Some</b>	<b>Some</b>
<b>Blebbing</b>	<b>Yes</b>	<b>No</b>
<b>Apoptotic bodies</b>	<b>Yes</b>	<b>No</b>

FIGURE 4

“06T20” 6255200F

# Apoptosis vs. Paraptosis: Biochemistry

	<u>Apoptosis</u>	<u>Paraptosis</u>
DEVD-cleaving activity	Yes	No
Caspase-3 processing	Yes	No
TUNEL staining	Yes	No
Internucleosomal DNA cleavage	Yes	No

FIGURE 5